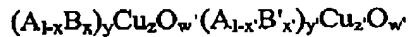


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IN THE CLAIMS:

1.-5. (Cancelled)

6. (Currently amended) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

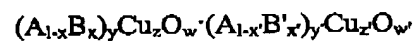
A is one rare earth element and

each of B and B' are two is one or more alkaline earth elements,

wherein the superconducting ceramic has the stoichiometric formula $YbBaSrCu_3O_{6.8}$.

7. (Cancelled)

8. (Currently amended) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

A is one rare earth element and

each of B and B' are two is one or more alkaline earth elements,

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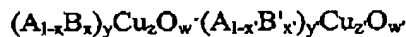
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wherein the superconducting ceramic has the stoichiometric formula ~~$\text{YbBa}_{0.7}\text{Sr}_{0.6}\text{Ca}_{0.6}\text{Cu}_3\text{O}_{6.8}$~~
 $\text{YbBa}_{0.7}\text{Sr}_{0.7}\text{Ca}_{0.6}\text{Cu}_3\text{O}_{6.8}$.

9. (Cancelled)

10. (Currently amended) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

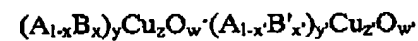
$$w' = 6.0-8.0,$$

A is more than one rare earth element and

each of B and B' ~~are two~~ is one or more alkaline earth elements,

wherein the superconducting ceramic has the stoichiometric formula $\text{Y}_{0.5}\text{Yb}_{0.5}\text{BaSrCu}_3\text{O}_{6.8}$.

11. (Currently amended) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

A is more than one rare earth element and

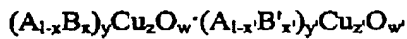
each of B and B' ~~are two~~ is one or more alkaline earth elements,

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wherein the superconducting ceramic has the stoichiometric formula $Y_{0.5}Yb_{0.5}BaCaCu_3O_{6.8}$.

12. - 38. (Cancelled)

39. (Currently amended) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

wherein A is one rare earth element, and

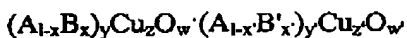
each of B and B' is one or more alkaline earth elements.

wherein A includes Yb,

B includes Ba and

B' includes Sr.

40. (Currently amended) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

wherein A is one rare earth element, and

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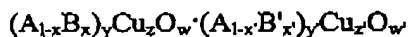
each of B and B' is one or more alkaline earth elements,

wherein A includes Yb,

B includes Ba and

B' includes Sr and Ca.

41. (Currently amended) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

wherein A is one rare earth element, and

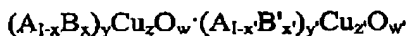
each of B and B' is one or more alkaline earth elements,

wherein A includes Y and Yb,

B includes Ba and

B' includes Sr.

42. (Currently amended) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

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wherein A is one rare earth element, and

each of B and B' is one or more alkaline earth elements.

wherein A includes Y and Yb,

B includes Ba and

B' includes Ca.

43. - 44. (Cancelled)

45. (New) A superconducting ceramic having the stoichiometric formula $\text{YbBaSrCu}_3\text{O}_{6-8}$.

46. (New) A superconducting ceramic having the stoichiometric formula $\text{YbBa}_{0.7}\text{Sr}_{0.7}\text{Ca}_{0.6}\text{Cu}_3\text{O}_{6-8}$.

47. (New) A superconducting ceramic having the stoichiometric formula $\text{Y}_{0.5}\text{Yb}_{0.5}\text{BaSrCu}_3\text{O}_{6-8}$.

48. (New) A superconducting ceramic having the stoichiometric formula $\text{Y}_{0.5}\text{Yb}_{0.5}\text{BaCaCu}_3\text{O}_{6-8}$.

49. (New) A superconducting ceramic having the stoichiometric formula $\text{Yb}_{0.5}\text{Gd}_{0.5}\text{Ba}_2\text{Cu}_3\text{O}_{6-8}$.

50. (New) A superconducting ceramic having the stoichiometric formula $\text{Yb}_{0.5}\text{Nd}_{0.5}\text{Ba}_2\text{Cu}_3\text{O}_{6-8}$.